Atty. Dkt. No. 041673-2053

## Amendments to the Claims:

Please add Claims 17 and 18 to the application, as set forth below. This listing of claims will replace all prior versions, and listings, of claims in the application:

## <u>Listing of Claims:</u>

- 1. (Original) A method for delivery of a therapeutic nervous system growth factor to targeted defective, diseased or damaged neurons in cortical tissues containing trkB receptors, the method comprising delivering a nervous system growth factor composition into one or more delivery sites within the targeted cortical tissues of a subject; wherein contact with the nervous system growth factor ameliorates the defect, disease or damage in the subject's cortical cells, including those in the entorhinal cortex (EC).
- 2. (Original) The method according to Claim 1, wherein the amelioration of the defect, disease or damage causes an improvement in cognitive function in the treated subject.
- 3. (Original) The method according to Claim 2, wherein the growth factor is brain derived neurotrophic factor (BDNF).
- 4. (Original) The method according to Claim 1, wherein the growth factor is NT-4/5.
- 5. (Original) The method according to Claim 1, wherein the growth factor is NT-3.
- 6. (Original) The method according to Claim 1, wherein the growth factor is a recombinant protein delivered by *in situ* expression of the growth factor from a recombinant expression vector.
- 7. (Original) The method according to Claim 6, wherein the recombinant expression vector is a lentiviral vector.
- 8. (Original) The method according to Claim 7, wherein the lentiviral vector is HIV-1.
- 9. (Original) The method according to Claim 1, wherein the growth factor composition is delivered by infusion into the EC.
- 10. (Original) The method according to Claim 9, wherein the infusion is accomplished over an extended period of time via a micropump.
- 11. (Original) The method according to Claim 1, wherein the subject is a human.

Atty. Dkt. No. 041673-2053

- 12. (Original) The method according to Claim 11, wherein the human is suffering from Alzheimer's disease, and the disease is ameliorated by stimulation of growth of neurons in the EC.
- 13. (Original) The method according to Claim 11, wherein the disease is ameliorated by reversal of deficits in cognitive function associated with the Alzheimer's disease.
- 14. (Original) The method according to Claim 1, wherein the targeted defective, diseased or damaged neurons include those in the hippocampal cortex.
- 15. (Original) The method according to Claim 1, wherein the defective, diseased or damaged neurons include those in the frontal cortex, parietal cortex temporal cortex or visual cortex.
- 16. (Original) The method according to Claim 1, wherein the defect or disease in, or damage to, the neurons is the result of aging.
- 17. (New) The method according to Claim 1, wherein the growth factor is NGF.
- 18. (New) The method according to Claim 6, wherein the recombinant expression vector is an adeno-associated vector.